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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	Jun 03	New e-mail delivery for search results now available
NEWS 4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 7	Sep 03	JAPIO has been reloaded and enhanced
NEWS 8	Sep 16	Experimental properties added to the REGISTRY file
NEWS 9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11	Oct 24	BEILSTEIN adds new search fields
NEWS 12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13	Nov 18	DKILIT has been renamed APOLLIT
NEWS 14	Nov 25	More calculated properties added to REGISTRY
NEWS 15	Dec 04	CSA files on STN
NEWS 16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17	Dec 17	TOXCENTER enhanced with additional content
NEWS 18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS 20	Feb 13	CANCERLIT is no longer being updated
NEWS 21	Feb 24	METADEX enhancements
NEWS 22	Feb 24	PCTGEN now available on STN
NEWS 23	Feb 24	TEMA now available on STN
NEWS 24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 25	Feb 26	PCTFULL now contains images
NEWS 26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27	Mar 20	EVENTLINE will be removed from STN
NEWS 28	Mar 24	PATDPAFULL now available on STN
NEWS 29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 30	Apr 11	Display formats in DGENE enhanced
NEWS 31	Apr 14	MEDLINE Reload
NEWS 32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 33	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 35	Apr 28	RDISCLOSURE now available on STN
NEWS 36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS 37	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS 38	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 39	May 16	CHEMREACT will be removed from STN
NEWS 40	May 19	Simultaneous left and right truncation added to WSCA
NEWS 41	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 42	Jun 06	Simultaneous left and right truncation added to CBNB

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 NEWS 43  Jun 06  PASCAL enhanced with additional data

 NEWS EXPRESS  April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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FILE 'HOME' ENTERED AT 18:56:21 ON 18 JUN 2003

=> file caplus medline embase scisearch biosis
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               0.21       0.21

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FILE 'BIOSIS' ENTERED AT 18:56:53 ON 18 JUN 2003
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=> s (rosaposin or saposin)
L1          1163 (ROSAPOSIN OR SAPOSIN)

=> s (prosaposin or saposin)
L2          1521 (PROSAPOSIN OR SAPOSIN)

=> l2 and fusogenic
L2 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l2 and fusogenic
L3            3 L2 AND FUSOGENIC

=> l2 and ((vesicle fusion) or (liposome fusion) or (anionic liposome) or (anionic
phospholipid))
L2 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
```

For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l2 and ((vesicle fusion) or (liposome fusion) or (anionic liposome) or (anionic phospholipid))
L4 28 L2 AND ((VESICLE FUSION) OR (LIPOSOME FUSION) OR (ANIONIC LIPOSOME) OR (ANIONIC PHOSPHOLIPID))

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 9 DUP REM L4 (19 DUPLICATES REMOVED)

=> s l5 or l3
L6 11 L5 OR L3

=> s l6 and py<=2000
3 FILES SEARCHED...
L7 6 L6 AND PY<=2000

=> d l7 bib hit

L7 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS
AN 2000:840748 CAPLUS
DN 134:158933
TI Degradation of membrane-bound ganglioside GM1. Stimulation by bis(monoacylglycero)phosphate and the activator proteins SAP-B and GM2-AP
AU Wilkening, Gundo; Linke, Thomas; Uhlhorn-Dierks, Gunther; Sandhoff, Konrad
CS Kekule Institute for Organic Chemistry and Biochemistry, Bonn, 53121, Germany
SO Journal of Biological Chemistry (**2000**), 275(46), 35814-35819
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
SO Journal of Biological Chemistry (**2000**), 275(46), 35814-35819
CODEN: JBCHA3; ISSN: 0021-9258
AB According to our hypothesis glycosphingolipids of the plasma membrane are digested after endocytosis as components of intraendosomal and intralysosomal vesicles and membrane structures. The lysosomal degrdn. of glycosphingolipids with short oligosaccharide chains by acid exohydrolases requires small, non-enzymic cofactors, called sphingolipid activator proteins (SAPs). A total of five activator proteins have been identified as follows: namely the **saposins** SAP-A, -B, -C, and -D, which are derived from the single chain SAP-precursor protein (**prosaposin**), and the GM2 activator protein. A deficiency of **prosaposin** results in the storage of ceramide and sphingolipids with short oligosaccharide head groups. The loss of the GM2 activator protein blocks the degrdn. of the ganglioside GM2. The enzymic hydrolysis of the ganglioside GM1 is catalyzed by .beta.-galactosidase, a water-sol. acid exohydrolase. The lack of ganglioside GM1 accumulation in patients suffering from either **prosaposin** or GM2 activator protein deficiency has led to the hypothesis that SAPs are not needed for the hydrolysis of the ganglioside GM1 in vivo. In this study we demonstrate that an activator protein is required for the enzymic degrdn. of membrane-bound ganglioside GM1 and that both SAP-B and the GM2 activator protein significantly enhance the degrdn. of the ganglioside GM1 by acid .beta.-galactosidase in a liposomal, detergent-free assay system. These findings offer a possible explanation for the observation that no storage of the ganglioside GM1 has been obsd. in patients with either isolated **prosaposin** or isolated GM2 activator deficiency. We also demonstrate that **anionic phospholipids** such as bis(monoacylglycero)phosphate and phosphatidylinositol, which specifically

occur in inner membranes of endosomes and in lysosomes, are essential for the activator-stimulated hydrolysis of the ganglioside GM1. Assays utilizing surface plasmon resonance spectroscopy showed that bis(monoacylglycero)phosphate increases the binding of both .beta.-galactosidase and activator proteins to substrate-carrying membranes.

IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**saposin** B, SAP-B; .beta.-galactosidase degrdn. of membrane-bound ganglioside GM1 is stimulated by bis(monoacylglycero)phosphate and activator proteins SAP-B and GM2-AP)

=> d l7 bib hit 2-6

L7 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS
AN 2000:272811 CAPLUS
DN 133:85956
TI Further studies on the reconstitution of glucosylceramidase activity by Sap C and **anionic phospholipids**
AU Salvioli, R.; Tatti, M.; Ciaffoni, F.; Vaccaro, A. M.
CS Department of Metabolism and Pathological Biochemistry, Istituto Superiore Sanita, Rome, 00161, Italy
SO FEBS Letters (**2000**), 472(1), 17-21
CODEN: FEBLAL; ISSN: 0014-5793
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI Further studies on the reconstitution of glucosylceramidase activity by Sap C and **anionic phospholipids**
SO FEBS Letters (**2000**), 472(1), 17-21
CODEN: FEBLAL; ISSN: 0014-5793
AB The reconstitution of the activity of the lysosomal enzyme glucosylceramidase requires **anionic phospholipids** and at least one protein factor, **saposin** C (Sap C). We have previously proposed a mechanism for the glucosylceramidase activation [Vaccaro et al. (1993) FEBS Lett. 336, 159-162] which implies that Sap C promotes the assocn. of the enzyme with **anionic phospholipid**-contg. membranes, thus promoting contact between the enzyme and its lipid substrate, glucosylceramide. We have further investigated the properties of Sap C using a fluorescent hydrophobic probe such as 4,4'-dianilino-1,1'-binaphthyl-5,5'-disulfonic acid (bis-ANS). The binding between bis-ANS and Sap C was pH-dependent, indicating that protonation leads to increased exposure of hydrophobic surfaces of Sap C. The interaction of Sap C with membranes, triggered by the development of hydrophobic properties at low pH values, was affected by the content of **anionic phospholipids**, such as phosphatidylserine or phosphatidylinositol, suggesting that **anionic phospholipids** have the potential to modulate the insertion of Sap C in the hydrophobic environment of lysosomal membranes. We previously showed that Sap C and **anionic phospholipids** are both required for the binding of glucosylceramidase to large vesicles. We have presently obsd. that Sap C is able to promote the assocn. of glucosylceramidase with the lipid surface only when **anionic phospholipids** exceed a concn. of 5-10%. This level can be reached by summing lower amts. of individual **anionic phospholipids**, since they have additive effects. The present data extend and refine our model of the mechanism of glucosylceramidase activation and stress the key role of pH, Sap C and **anionic phospholipids** in promoting the interaction of the enzyme with membranes.

ST glucosylceramidase interaction membrane **saposin** C **anionic phospholipid**

IT Phospholipids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(acidic; **saposin** C-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

IT Membrane, biological
(bilayer; **saposin** C-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

IT Protonation
(biol.; evidence that protonation leads to increased exposure of hydrophobic surfaces in **saposin** C)

IT Glycoproteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**saposin** C; **saposin** C-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

IT 37228-64-1, Glucosylceramidase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**saposin** C-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

L7 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS
AN 1999:503862 CAPLUS
DN 131:268563
TI Structural and membrane-binding properties of **saposin** D
AU Tatti, Massimo; Salvioli, Rosa; Ciaffoni, Fiorella; Pucci, Piero; Andolfo, Annapaola; Amoresano, Angela; Vaccaro, Anna Maria
CS Laboratoria Metabolismo e Biochimica Patologica, Istituto Superiore Sanita, Rome, 00161, Italy
SO European Journal of Biochemistry (**1999**), 263(2), 486-494
CODEN: EJBCAI; ISSN: 0014-2956
PB Blackwell Science Ltd.
DT Journal
LA English
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Structural and membrane-binding properties of **saposin** D
SO European Journal of Biochemistry (**1999**), 263(2), 486-494
CODEN: EJBCAI; ISSN: 0014-2956

AB **Saposin** D is generated together with three similar proteins, **saposins** A, B and C, from a common precursor, called **prosaposin**, in acidic organelles such as late endosomes and lysosomes. Although **saposin** D has been reported to stimulate the enzymic hydrolysis of sphingomyelin and ceramide, its physiol. role has not yet been clearly established. In the present study we examd. structural and membrane-binding properties of **saposin** D. At acidic pH, **saposin** D showed a great affinity for phospholipid membranes contg. an **anionic phospholipid** such as phosphatidylserine or phosphatidic acid. The binding of **saposin** D caused destabilization of the lipid surface and, conversely, the assocn. with the membrane markedly affected the fluorescence properties of **saposin** D. The presence of phosphatidylserine-contg. vesicles greatly enhanced the intrinsic tyrosine fluorescence of **saposin** D, which contains tyrosines but not tryptophan residues. The structural properties of **saposin** D were investigated in detail using advanced MS anal. It was found that the main form of **saposin** D

consists of 80 amino acid residues and that the six cysteine residues are linked in the following order: Cys5-Cys78, Cys8-Cys72 and Cys36-Cys47. The disulfide pattern of **saposin** D is identical with that previously established for two other **saposins**, B and C, which also exhibit a strong affinity for lipids. The common disulfide structure probably has an important role in the interaction of these proteins with membranes. The anal. of the sugar moiety of **saposin** D revealed that the single N-glycosylation site present in the mol. is mainly modified by high-mannose-type structures varying from two to six hexose residues. Deglycosylation had no effect on the interaction of **saposin** D with phospholipid membranes, indicating that the glycosylation site is not related to the lipid-binding site. The assocn. of **saposin** D with membranes was highly dependent on the compn. of the bilayer. Neither ceramide nor sphingomyelin, sphingolipids whose hydrolysis is favored by **saposin** D, promoted its binding, while the presence of an acidic phospholipid such as phosphatidylserine or phosphatidic acid greatly favored the interaction of **saposin** D with vesicles at low pH. These results suggest that, in the acidic organelles where **saposins** are localized, **anionic phospholipids** may be determinants of the **saposin** D topol. and, conversely, **saposin** D may affect the lipid organization of **anionic phospholipid**-contg. membranes.

ST **saposin** D structure disulfide oligosaccharide phospholipid membrane assocn

IT Membrane, biological
(bilayer; structural and membrane-binding properties of **saposin** D)

IT Phospholipids, biological studies
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(bilayer; structural and membrane-binding properties of **saposin** D)

IT Phosphatidic acids
Phosphatidylserines
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(effect of acidic phospholipids in bilayer membrane on **saposin** binding; structural and membrane-binding properties of **saposin** D)

IT Disulfide group
(localization in **saposin** D; structural and membrane-binding properties of **saposin** D)

IT Mannooligosaccharides
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(of **saposin** D; structural and membrane-binding properties of **saposin** D)

IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(**saposins**, D; structural and membrane-binding properties of **saposin** D)

IT 52-90-4, L-Cysteine, properties
RL: PRP (Properties)
(identification of Cys residues involved in disulfide pattern of **saposin** D; structural and membrane-binding properties of **saposin** D)

L7 ANSWER 4 OF 6 SCISEARCH COPYRIGHT 2003 THOMSON ISI

AN 2000:109878 SCISEARCH

GA The Genuine Article (R) Number: 274RR

TI Mechanistic and kinetic studies of **saposin** C induced **vesicle fusion**

AU Qi X Y (Reprint); Grabowski G A

CS CHILDRENS HOSP RES FDN, CINCINNATI, OH 45229; UNIV CINCINNATI, COLL MED, CINCINNATI, OH 45229
CYA USA
SO BIOPHYSICAL JOURNAL, (**JAN 2000**) Vol. 78, No. 1, Part 2, pp. PO330-PO330.
Publisher: BIOPHYSICAL SOCIETY, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3998.
ISSN: 0006-3495.
DT Conference; Journal
FS LIFE
LA English
REC Reference Count: 0
TI Mechanistic and kinetic studies of **saposin** C induced **vesicle fusion**
SO BIOPHYSICAL JOURNAL, (**JAN 2000**) Vol. 78, No. 1, Part 2, pp. PO330-PO330.
Publisher: BIOPHYSICAL SOCIETY, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3998.
ISSN: 0006-3495.

L7 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2001:36147 BIOSIS
DN PREV200100036147
TI Studies on the mechanism of action of **saposins**.
AU Vaccaro, A. M. (1); Ciaffoni, F. (1); Tatti, M. (1); Salvioli, R. (1)
CS (1) Laboratorio Metabolismo e Biochimica Patologica, Istituto Superiore Sanita', Roma Italy
SO Journal of Inherited Metabolic Disease, (**July, 2000**) Vol. 23, No. Supplement 1, pp. 218. print.
Meeting Info.: VIIIth International Conference on Inborn Errors of Metabolism England, Cambridge, UK September 13-17, 2000
ISSN: 0141-8955.
DT Conference
LA English
SL English
TI Studies on the mechanism of action of **saposins**.
SO Journal of Inherited Metabolic Disease, (**July, 2000**) Vol. 23, No. Supplement 1, pp. 218. print.
Meeting Info.: VIIIth International Conference on Inborn Errors of Metabolism England, Cambridge, UK September 13-17, 2000
ISSN: 0141-8955.
IT Major Concepts
Clinical Chemistry (Allied Medical Sciences); Enzymology (Biochemistry and Molecular Biophysics)
IT Parts, Structures, & Systems of Organisms
endosome; lysosome
IT Diseases
Gaucher disease: behavioral and mental disorders, blood and lymphatic disease, genetic disease, metabolic disease; metachromatic leukodystrophy: genetic disease, metabolic disease, nervous system disease; sphingolipidoses: genetic disease, metabolic disease
IT Chemicals & Biochemicals
Sap A [**saposin** A]: mechanism of action, pharmacodynamics; Sap C [**saposin** C]: mechanism of action, pharmacodynamics; Sap D [**saposin** D]: mechanism of action, pharmacodynamics; **anionic phospholipid**; glucosylceramidase; glucosylceramide: degradation; lysosomal hydrolase: enzyme; **saposin**: mechanism of action, pharmacodynamics, precursor; sphingolipid: degradation
IT Alternate Indexing
Gaucher's Disease (MeSH); Leukodystrophy, Metachromatic (MeSH); Sphingolipidoses (MeSH)

L7 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 2000:137098 BIOSIS
DN PREV200000137098
TI Mechanistic and kinetic studies of **saposin** C induced **vesicle fusion.**
AU Qi, Xiaoyang (1); Grabowski, G. A. (1)
CS (1) Children's Hospital Research Foundation, University of Cincinnati College of Medicine, Cincinnati, OH, 45229 USA
SO Biophysical Journal., (**Jan., 2000**) Vol. 78, No. 1 Part 2, pp. 57A.
Meeting Info.: 44th Annual Meeting of the Biophysical Society. New Orleans, Louisiana, USA February 12-16, 2000
ISSN: 0006-3495.
DT Conference
LA English
SL English
TI Mechanistic and kinetic studies of **saposin** C induced **vesicle fusion.**
SO Biophysical Journal., (**Jan., 2000**) Vol. 78, No. 1 Part 2, pp. 57A.
Meeting Info.: 44th Annual Meeting of the Biophysical Society. New Orleans, Louisiana, USA February 12-16, 2000
ISSN: 0006-3495.
IT Major Concepts
Biochemistry and Molecular Biophysics; Membranes (Cell Biology); Methods and Techniques
IT Chemicals & Biochemicals
lipid vesicles; lipids; liposomes; **saposin** C
IT Methods & Equipment
electron microscopy: microscopy method, microscopy: CB, microscopy: CT
IT Miscellaneous Descriptors
membrane fusion; **saposin** C-induced **vesicle fusion**: kinetic studies, mechanistic studies; Meeting Abstract
RN 113914-35-5 (**SAPOSIN** C)